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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,744	01/10/2002	Yoshitoshi Kurose	FUJO 19.290	6509

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EXAMINER	
SCUDERI, PHILIP S	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/043,744	KUROSE, YOSHITOSHI	
	Examiner	Art Unit	
	Philip S. Scuderi	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *3 and 14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-13 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the amendment filed on 12 October 2006.

Response to Arguments

I. Election of Species Requirement

Applicant's arguments in regards to the election of species requirement have been fully considered but they are not persuasive.

Applicant contends that the instant amendments render the election of species requirement moot because "now claim 3 and 14 each depend from an independent claims which was part of the elected species."

Of course claims 3 and 14 depend from generic independent claims that are part of the elected species. Claims 3 and 14 depended from generic independent claims that were part of the elected species when they were withdrawn. Claims directed to a non-elected species shall be rejoined and fully examined for patentability if they require all the limitations of an allowable claim. MPEP § 821.04(a). Here, the claims from which withdrawn claims 3 and 14 depend are not allowable. The examiner will properly consider claim 3 and 14 withdrawn unless the claims from which they depend are determined to be allowable.

II. Dingsor (US 2002/0129165)

Applicant's arguments in regards to the Dingsor reference have been fully considered but they are not persuasive.

Applicant contends that "when the response packet is transmitted to the source of the packet [it] is modified such that upon receipt by the client it appears that it was received by the originally intended server."

What applicant appears to be getting at is that Dingsor does not expressly disclose that servers (200) translate the source address of the response packets to the original destination address of the incoming packets. The examiner agrees that Dingsor does not expressly disclose this feature.

Assuming arguendo that Dingsor does not teach that the server translates the source address of the response packets to the original destination address, Dingsor still anticipates at least the independent claims.

For example, claim 1 reads on conventional network address translation, which is performed by NAT Machine 100 when the servers don't have translation instructions (paragraph [0023]). Server 200 meets the claimed transmitting and receiving unit because it receives packets translated by NAT Machine 100 and transmits responses to the received packets (figure 4). NAT Machine 100 meets the claimed source address modification unit because it performs outbound translations on the response packets that in this case would include modifying the source address because this was the conventional way of performing network address translation and Dingsor states that the source address can be modified depending on the application.

Even though Dingsor does not expressly disclose that the servers (200) translate the source address of response packets this feature is at least obvious under § 103 (and more likely implicit under § 102). The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. MPEP § 2112.

Connections are established between clients (30) and servers (200) through the NAT Machine (100) (paragraph [0024]). When the servers (200) have the appropriate translation instructions they perform outbound translation of the response packets (paragraphs [0026]-[0028]). "[D]epending on the application" the source address can be modified during translation operations (paragraph [0032]). Making the source addresses of response packets the source address of a server (200) produces unreasonable results because it is reasonable for the clients (30) to assume that the source address of a response packet is the same as the destination address of the corresponding request packet. There are numerous prior art references that establish that it was well known in the art that such an unreasonable result could cause confusion at the clients and would therefore be obvious to avoid. Two examples are provided below.

U.S. Patent No. 6,370,584 to Bestavros et al. discloses a similar system wherein a new destination device that responds to a client's request and that replaces the new IP source address with "the original IP source address ... to avoid confusion at the client device" (column 3, lines 55-67).

U.S. Patent No. 6,438592 to Killian discloses a similar system wherein a request is forwarded to a backend server that generates a response and uses the IP address of the server to which the client sent the request as the source address of the response because "the client is expecting a response from the same address to which it sent the original URL request" (column 2, lines 20-48).

That Dingsor does not suggest that the clients (30) have any knowledge of the operations performed by the NAT Machine (100) suggests to the examiner that the servers (200) do translate the source address of the response packets to the original destination address of the incoming packets because failure to do so would create an unreasonable result as discussed above. In considering the disclosure of a reference, it is proper to take into account not only specific teachings

of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. MPEP § 2144.01. Even if there is some ambiguity as to whether this feature is implicit, the feature is clearly obvious under § 103 because it would have been obvious to avoid the unreasonable results discussed above.

Claim Rejections - 35 USC §§ 102-103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §§ 102-103 that form the basis for the rejections under 35 U.S.C. §§ 102-103 made in this Office action:

> A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 6-13, and 15-17 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dingsor (US 2002/0129165).

Regarding claim 1, Dingsor teaches a communications device connected to a network with a client communications device and a destination address modification device modifying a destination address of data transmitted from the client communications device to an address of another communications device, comprising:

a transmitting and receiving unit (Server 200) receiving communications data with a destination address modified by the destination address modification device (NAT Machine 100) and transmitting response data in response to the communications data (figure 4); and

a source address modification unit (Server 200) modifying a source address of the response data in response to the communications data with the destination address modified by the destination address modification device, to an address of a communication device that is an original destination (figure 4; see also the "Response to Arguments" section above).

Regarding claim 2, Dingsor further teaches:

an acquisition unit obtaining destination address modification information transmitted from the destination address modification device (paragraph [0025]); and

the source address modification unit modifies the source address of the response data to the address of the communication device that is the original destination, based on the destination address modification information obtained by the acquisition unit (paragraphs [0028] and [0032]).

Regarding claim 6, Dingsor teaches an address modification device connected to a network with a communications device, comprising:

a transmitting and receiving unit (Server 202) receiving communications data with a destination address modified and transmitting response data in response to the communications data (figure 4);

a destination address modification unit (NAT Device 100) modifying a destination address of the communications data transmitted from the communications device to an address of another communications device (figure 4);

a modification unit (Server 202) modifying a source address of the response data in response to the communications data with the destination address modified by the destination address modification unit, to an address of a communication that is an original destination and transmitting

address modification information to a communications device with a modified address (figure 4; see also the "Response to Arguments" section above).

Regarding claim 7, Dingsor further teaches that the modification unit transmits address modification information of the communications data to the relevant communications device when receiving a send request for the address modification information (paragraph [0025]).

Regarding claim 8, Dingsor further teaches that the modification unit transmits information indicating the destination address before modification as modification information (paragraphs [0025] and [0032]).

Regarding claim 9, Dingsor further teaches that the modification unit adds information indicating the destination address before modification to a data section of the communications data and transmits the data (figure 4).

Regarding claim 10, Dingsor teaches a communications method in a network comprised of a destination address device and a plurality of communications devices, comprising:

receiving communications data with a destination address modified by the destination address modification device (figure 4);

transmitting response data in response to the communications data (figure 4); and

modifying a source address of the response data in response to the communications data transmission with the destination address modified by the destination address modification device,

to an address of a communication device that is an original destination (figure 4; see also the "Response to Arguments" section above).

Regarding claim 11, Dingsor further teaches:

requesting the destination address modification device to transmit address modification information (figure 4); and

receiving the destination address modification information from the destination address modification device and modifying a source address of data in response to communications data with an address modified by the destination address modification device based on the address modification information (figure 4).

Regarding claim 12, Dingsor further teaches modifying a source address of response data to the source of the communications data with a destination address modified by the destination address modification device based on the modification information (figure 4; see also the "Response to Arguments" section above).

Regarding claim 13, Dingsor teaches a computer-readable communications control program performing control of communications in a network comprised of destination address modification device and a plurality of communication devices to enable a computer to implement functions, the functions comprising:

receiving communications data with a destination address modified by the destination address modification device (figure 4);

transmitting data in response to the communications data (figure 4);

modifying a source address of the response data to the communications data transmission with the destination address modified by the destination address modification device to an address of a communications device that is an original destination (figure 4; see also the "Response to Arguments" section above).

Regarding claim 15, Dingsor teaches a computer-readable storage medium which stores a program for enabling a computer to implement functions, the functions comprising:

receiving communications data with a destination address modified by a destination address modification device;

transmitting response data in response to the communications data; and

modifying a source address of the response data to the communications data transmission with the destination address modified by the destination address modification device to an address of a communications device that is an original destination (figure 4; see also the "Response to Arguments" section above).

Regarding claim 16, Dingsor teaches a communications system in which an address modification device for modifying an address of communications data received from another communications device and a plurality of communications devices for transmitting and receiving data in response to the communications data with a modified address are connected through a network, comprising:

an address modification device, further comprising:

a transmitting and receiving unit receiving communications data with a destination address modified and transmitting response data in response to the communications data (figure 4);

a destination address modification unit modifying an address of the communications data, and each of a plurality of communications devices to an address of another communications device (figure 4); and

a source address modification unit modifying a source address of the response data to the address of the communication device that is the original destination based on the destination address modification information transmitted from the destination address modification device (figure 4; see also the "Response to Arguments" section above).

Regarding claim 17, a communications system in which an address modification device for modifying an address of communications data received from another communications device and a plurality of communications devices for transmitting and receiving data in response to the communications data with a modified address are connected through a network, comprising:

an address modification device, comprising:

a transmitting and receiving unit receiving communications data with a destination address modified and transmitting response data in response to the communications data (figure 4);

a destination address modification unit modifying a destination address of the communications data transmitted from the communications device to an address of another communications device (figure 4); and

a modification unit modifying a source address of the response data in response to the communications data with the destination address modified by the destination address modification unit, to an address of a communication that is an original destination and transmitting address modification information to a communications device with a modified address (figure 4; see also the "Response to Arguments" section above), and

each of plurality of communications devices, comprising:

an acquisition unit obtaining destination address modification information transmitted from the destination address modification device (figure 4); and

a source address modification unit modifying a source address of the response data to the address of the communication device that is the original destination, based on the destination address modification information obtained by the acquisition unit (figure 4; see also the "Response to Arguments" section above).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as obvious over Dingsor (US 2002/0129165).

Dingsor teaches the communications device according to claim 1. Dingsor does not expressly disclose assigning a process to a relevant communications processing unit of a plurality of communications processing units based on communications ports added to the communications data.

The communications processing units appear to be applications that respond to requests sent by a client. At minimum, the claimed communications processing units read on such applications. It was common in the art for servers to select applications to respond to client requests based on ports specified in the requests so that the servers could properly map requests to the appropriate applications. It would have been obvious to do so here for the same reasons.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS

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